

# VARISCITE LTD. DART-SD410 EMC Radiation test

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## **Document Revision History**

Revision	Date	Notes		
1.0	27/11/2016	Initial		
1.1	13/06/2017	Test Setup syntax error fixed		

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## 1 Introduction

This Document presents the DART-SD410 EMC radiation test, held at the "THE STANDARDS INSTITUTION OF ISRAEL" EMC test labs (<u>http://www.sii.org.il/896-en/SII\_EN.aspx</u>).

### 2 Test Set up

Test setup includes DART-SD410 Rev 1.0 VPC0219 module assembled on a VAR-SD410CustomBoard carrier board Rev 1.01 VPC0238, powered by 5V linear power supply.

The following DART-SD410 features were enabled:

- 1. Android 5.1 Running
- 2. WLAN and BT controller
- 3. 24 Bit DSI LCD controller
- 4. Ethernet controller
- 5. Audio codec

The following VAR-SD410CustomBoard features were enabled:

- 1. 3.3V DC-DC power supply
- 2. DSI to LVDS bridge
- 3. LVDS display
- 4. Touch screen
- 5. USB hub
- 6. USB to Ethernet bridge

#### 3 Results

#### 3.1 Radiation Spectrum

The blue graph represents Vertical & Horizontal polarity radiation frequency measurements. The red line is the EN55022 Class B standard limits



#### 3.2 Peak Frequency Measurement

Frequency, Mhz	Peak, dBµV/m	QΡ, dBμV/m	QP Limit, dBμV/m	Delta QP (dB)
120.711	31.2	26.9	40.0	-13.1
147.272	29.2		40.0	
146.445		27.6	40.0	-12.4

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